

# Different Information Needs for Different Markets: URBAN and RURAL

Ali Mortazavi March 4, 2008

# Traveler Information/Advance Traveler Information System

- Empower the public with the information
- Static information
- Real-time information
  - Travel time a valuable source





### Advanced Traveler Information System

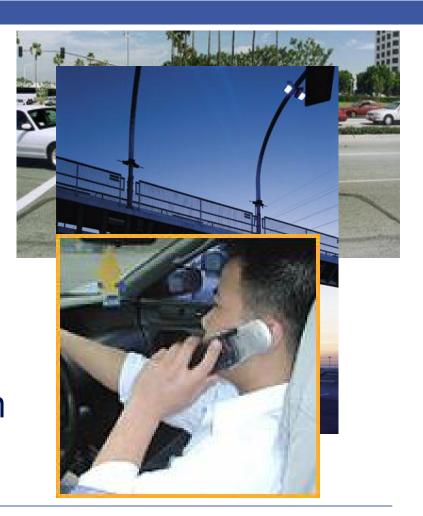
Sensors Loop Detector, Radar, ETC, LPR, Cell phones Deriver / **Data Integration** Algorithms Vehicle **Data Processing** Devices CMS, 511, HAR,...



Point Detection

Segment Detection

Floating Point/Cell Detection





### **Point Detection**



Doppler Radar

Video

Doppler Microwave

Passive Acoustic

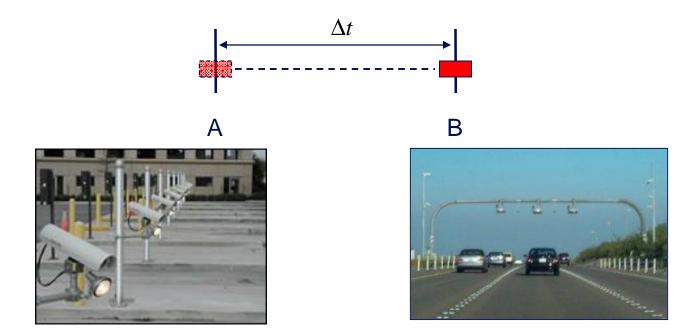




# **Segment Reading**

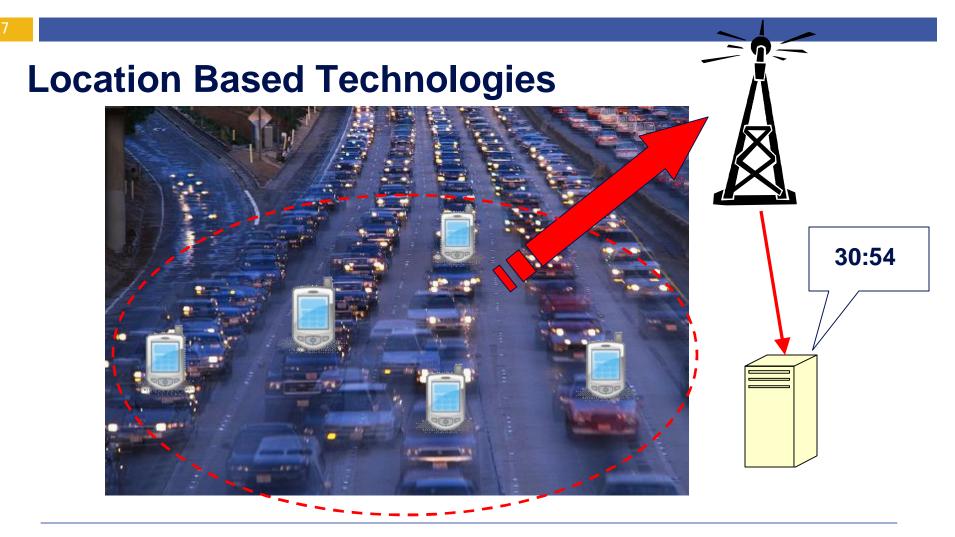
#### Toll Tag Readers/License Plate Readers

Lag time on traffic data





# **Floating Point**





#### Urban

1

Recurrent congestion
Condense sensor coverage
Need for traffic/transit info
Accuracy



### Mid-Size Urban

2

Less congestion
Poor sensor coverage
Accuracy
Weather, incident,...



### Rural

3

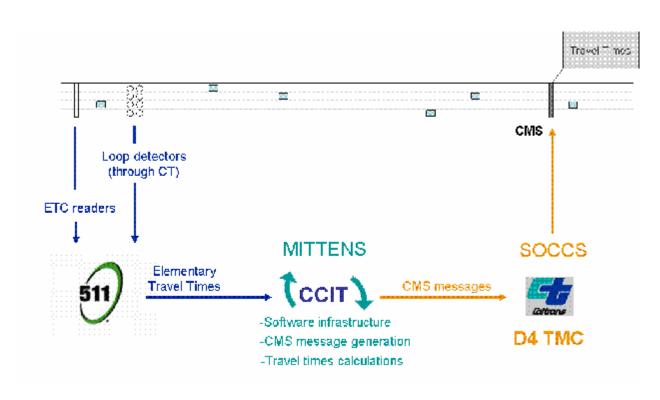
No congestion Different concept No sensor coverage Weather, incident,...





## 1-Travel Time on CMS-The Bay Area

9



**Schematic of Travel Time Display System in District 4** 

#### 20 highway travel time signs



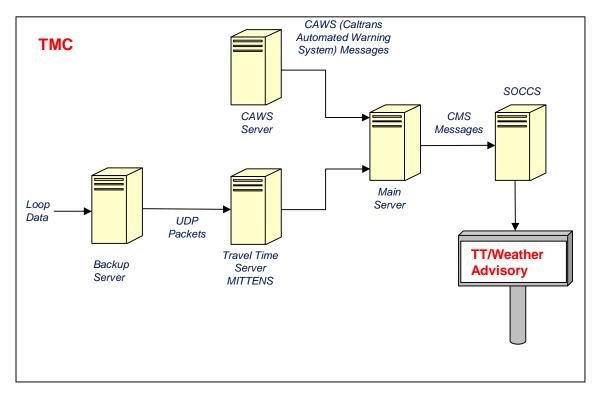
2 transit travel time signs





### 2-Travel Time on CMS- Stockton



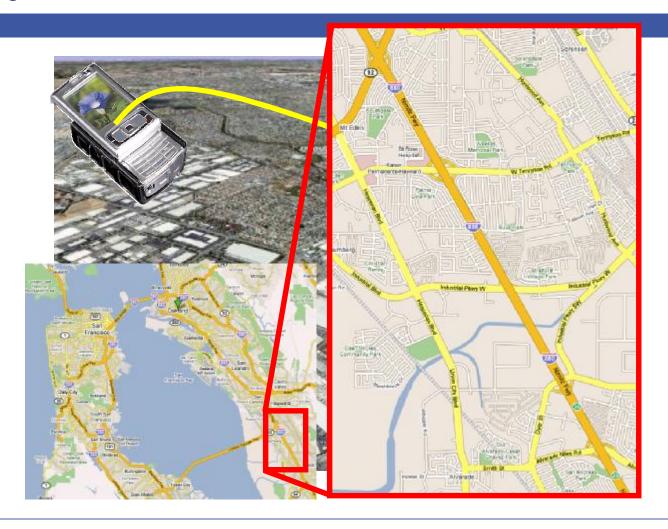




# 3-Traffic Data Collection-US 101 & CA-154

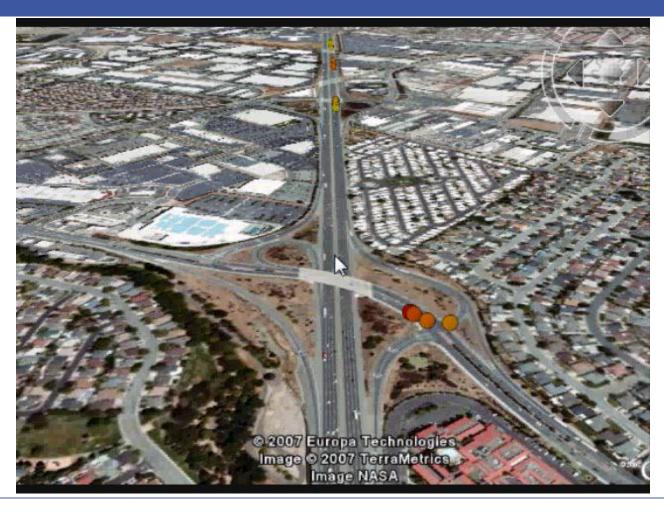








# GPS-Equipped Cell Phones as Traffic Probes



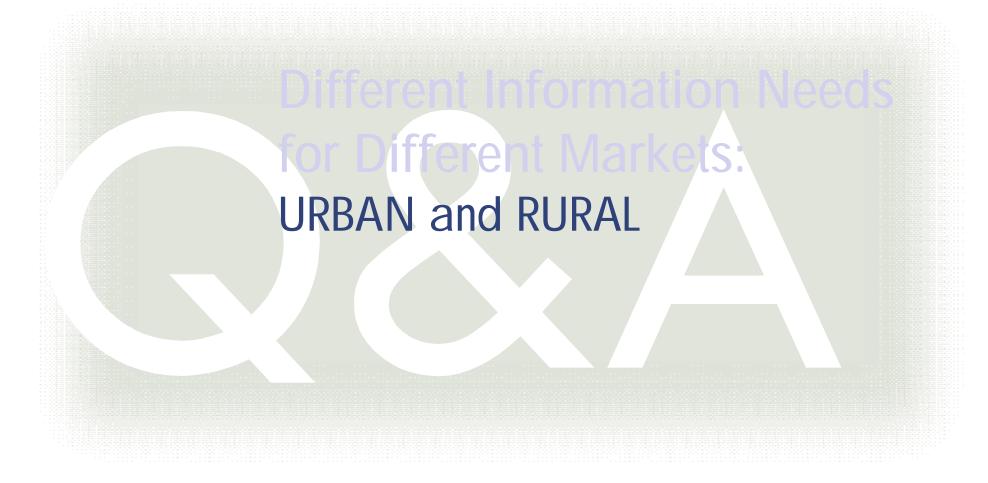


### Conclusions

- Need for expanding data coverage
- Hybrid solutions
- Public-Private Partnership
- Different requirements different solutions







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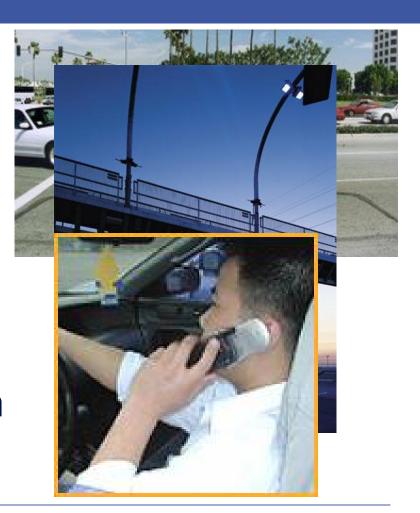
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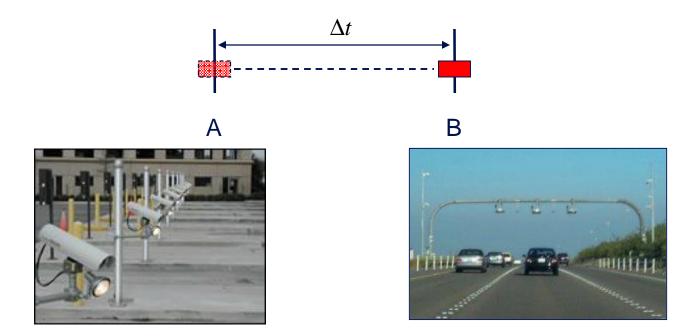




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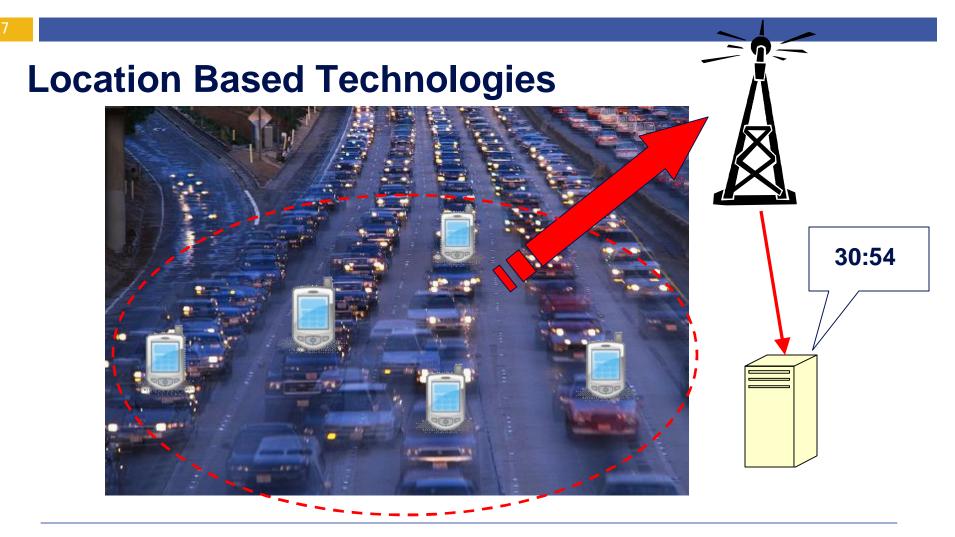
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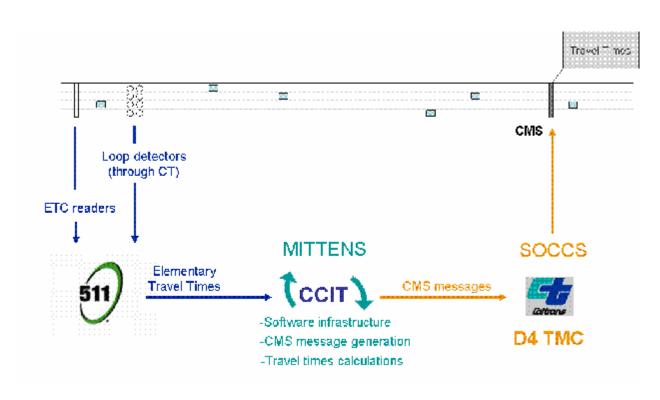
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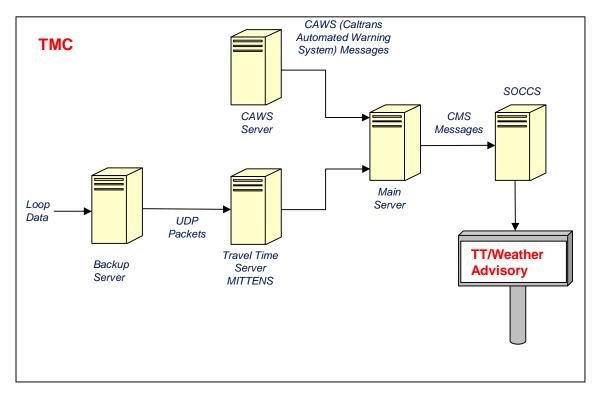
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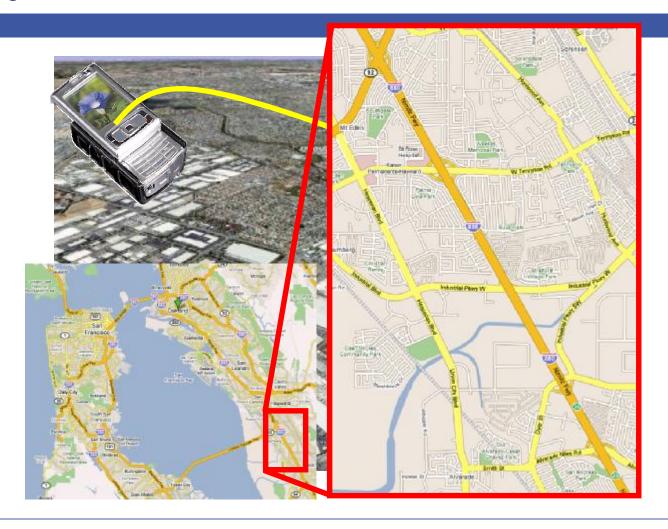




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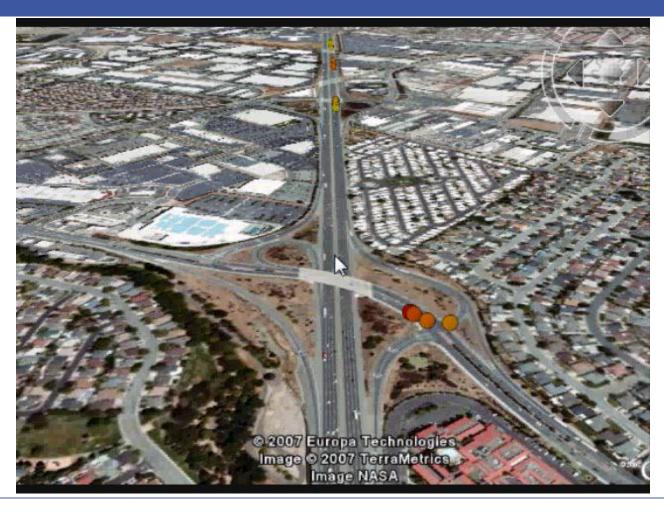








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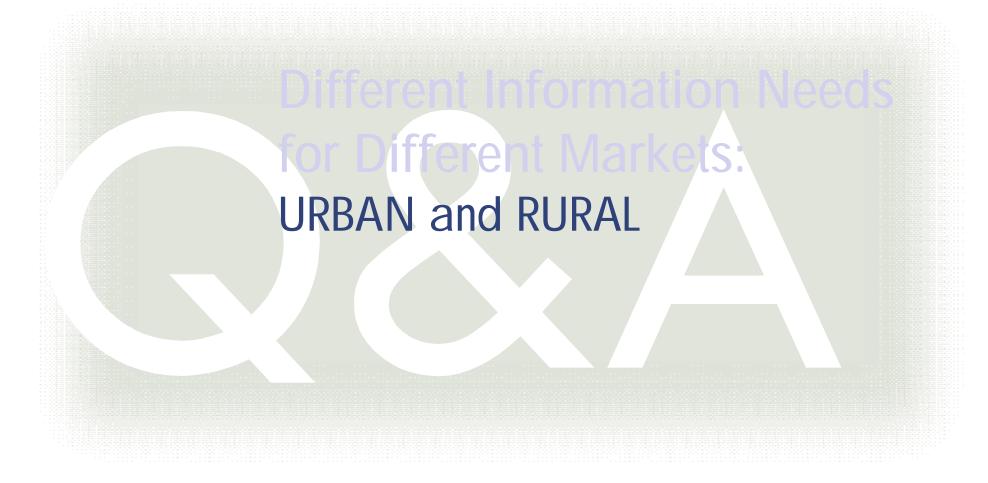


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